REMARKS

Claims Status:

Claims 1-16, 23, 25, 27-30, 33 and 35-40 remain pending in this application. Claim 1 is amended in an editorial manner by removing the terms "so as" as kindly pointed out by the Examiner.

Art-based Rejections:

Claims 1-16, 23, 25, 27-30, 33 and 35-40 stand rejected as being anticipated by U.S. Patent No. 6,950,532 (hereafter referred to as "the Schuman patent"). We respectfully traverse these rejections.

Claim 40 in view of the Schuman patent

Claim 40 recites – in combination with other features – averaging a plurality of content portions, and detecting auxiliary data from data representing averaged content portions. The auxiliary data is relatively more detectable from the data representing averaged content portions compared to individual portions including the auxiliary data.

The Office Action cited Col. 6, lines 24-34, Col. 6, lines 33-43 and Col. 7, lines 42-52 as meeting these features. We respectfully disagree.

While these passages discussing timing of imaging devices, temporal expansion and disruption directives, there is no discussion regarding detecting auxiliary data from data representing averaged content portions.

Claim 40 should be allowed.

Claim 16 in view of the Schuman patent

Claim 16 recites a detection method for the video embedded according to claim 1. The detection method includes averaging a plurality of the video frames including the first and second frames, the averaging improves the signal to noise ratio of the identification data to video content.

The cited Col. 6, lines 33-43 discusses timing of an imaging device and temporal expansion facilitated by timing differences between an IRD (e.g., a camcorder) and an

IGD (e.g., film projector). These statements do not discuss or suggest <u>averaging frames</u> <u>to improve signal to noise ratio</u> of the identification data to video content.

      Claim 16 should be allowed.

      Claim 33 in view of the Schuman patent

      Claim 33 recites a detector to detect the data provided according to claim 28. The detector <u>averages</u> a plurality of video frames <u>so that</u> provided data becomes consciously perceptible.

      The cited passage (Col. 3, lines 43-49) discusses selecting a pattern for inserting a watermark, which may involve a dynamic analysis of source content. This process is concerned with watermarking embedding, and not with watermark detection. Moreover, we see no discussion in the cited passage of averaging a plurality of video frames in the manner claimed.

      Claim 33 should be allowed.

      Claim 1 in view of the Schuman patent

      Claim 1 recites a method of embedding identification data in video. The method includes *embedding the identification data* <u>*in*</u> *a first video frame* prior to distribution or projection of the video, the embedded identification data being visually perceptible upon examination of the first frame; selecting a second video frame, wherein the first and second video frames are separate frames; and *embedding the identification data* <u>*in*</u> *the second video* frame prior to distribution or projection of the content, the embedded identification data being visually perceptible upon examination of the second frame, wherein the identification data is generally imperceptible upon real-time rendering of the video.

      The cited Col. 7, lines 42-53, passage states that disruption directives may be carried in the actual digital film data itself.

      These "disruption directives" cooperate with the so-called "disruptor" to disrupt projection to introduce anomalies or modulation in the projected film. See. Col. 5, lines 11-14, Col. 8, lines 52-64 and Figs. 1-6.

So these "disruption directives" control or influence the disrupter. (The disrupter control information may determine characteristics of the disruption such as the area or zone of the frame to be disrupted and which effect to produce in that zone.)

The relied upon passage does not embed the disruption directives (or disrupter control information) in the *first and second* frames so as to be visually perceptible upon examination of the first frame and second frame, but generally imperceptible upon real-time rendering of the video. There is no mention of this at all.

Indeed, these disruption directives (or control information) seem to be the information that controls the disrupter to insert anomalies or modulations during projection. The disruption directives are not the projected anomalies themselves.

This is different from the combination recited in claim 1.

We respectfully request that claim 1 be allowed.

Claim 2 in view of the Schuman patent

Claim 2 recites that the act of selecting comprises selecting the second frame so that the <u>repetition</u> of the embedded identification data is imperceptible to the human conscious mind when rendered.

The cited Col. 6, lines 24-33 passage ("human eye may not detect them") relies on "reduced intensity" of generated images and not repetition of embedded identification data.

Claim 2 should be allowed.

Claim 3 in view of the Schuman patent

Claim 3 recites that the identification data (of claim 1) is embedded in the same frame location in each of the first and second frames.

The cited Col. 6, lines 58-67 passage does not discuss this feature.

Rather, it discusses identifying information may indicate a location and time that an event was recorded. (The parenthetical on page 3 of the Office Action stating that if a human is to perceive a message, the message has to be in the same location from one frame to the next, may evidence a misunderstanding of claim 1. Claim 1 indicates that embedded data is preferably imperceptible when rendered in real-time.)

Claim 3 should be allowed.

Claim 5 in view of the Schuman patent

Claim 5 clarifies that the character recognition is device-aided character recognition, e.g., OCR or other character recognition. This is unlike a human perceiving a message as stated in the Office Action at page 5, lines 1-3.

Claim 8 in view of the Schuman patent

Like claim 2, discussed above, claim 8 recites that the second frame is selected so that the <u>repetition</u> of the embedded identification data is imperceptible to the unconscious human mind. The cited passage (Col. 6, lines 24-34) relies on reduced intensity.

Claim 8 should be allowed.

Claim 12 in view of the Schuman patent

Claim 12 recites that each of the plurality of identifiers is embedded to be spatially located in a <u>separate frame location</u> with respect to each other.

We see no discussion of this combination in the cited Col. 6, lines 58-67 passage. And the parenthetical "mark the content with messages" is not helpful in showing "separate frame locations".

Claim 12 should be allowed.

Claim 23 in view of the Schuman patent

Claim 23 recites – in combination with other features – a method of marking content with auxiliary data. The method is characterized in that the auxiliary data is embedded in the content prior to distribution or projection of the content so as to be humanly perceptible if examined in a finite segment or frame of the content, but is embedded in the content so as to be humanly imperceptible when examined as the content is rendered or projected in real-time.

The Office Action cites to the Schuman patent at Col. 7, lines 42-53. As discussed above with respect to claim 1, this passage discusses that so-called disruption directives (or disruptor control information) can be included in digital film. But there is

no teaching in this passage as to whether the control information is perceptible if examined in a finite segment, but is imperceptible when examined as the content is rendered.

 The rejection on page 6 of the Office Action also seems to misinterpret the Schuman patent. For example, the Office Action cites to disruption directives (Col. 7, lines 42-52) but then says that a generated image may contain disruption content. Recall, however, that the disruption directives *control the disruptor* to introduce anomalies in projected content. The disruption directives are not the projected anomalies themselves.

 Claim 23 stands ready for allowance.

 Claim 37 in view of the Schuman patent

 Claim 37 are also believed allowable over the Schuman patent.

 For example, claim 37 recites, in combination with other features, an act of embedding auxiliary data in the content through modifications of portions of the content. The modifications occur prior to distribution or projection of the content. Moreover the modifications are humanly perceptible if examined in a finite segment or frame of the content, but are provided in the content so as to be humanly imperceptible when examined as the content is rendered or projected in real-time.

 As discussed above, disruption directives (Col. 7, lines 42-52) control a disruptor to introduce anomalies in projected content. The disruption directives are not the projected anomalies themselves.

 Claim 37 should be allowed as well.

 Claim 27 in view of the Schuman patent

 Claim 27 recites features that are generally analogous to claim 23. (Of course features and limitations from claim 27 should not be read into claim 23, and vice versa.)

 Thus, claim 27 should be allowed for at least reasons that are analogous to those stated above with respect to claim 23.

 Claim 27 should be allowed.

Remaining Claims

The remaining claims are also believed to recite patentable combinations. Allowance of these claims is also requested.

Information Disclosure Statement:

An information disclosure statement is filed herewith. Consideration of the information disclosed therein is respectfully requested.

Conclusion:

An early Notice of Allowance is respectfully requested. In the meantime, the Examiner is invited to contact the undersigned with any questions.

Date: August 29, 2007   Respectfully submitted,

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